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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,110	12/06/2001	Kazunori Suzuki	461-36	5207

7590 08/07/2003

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EXAMINER

JUBA JR, JOHN

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 08/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/003,110

Applicant(s)

SUZUKI ET AL.

Examiner

John Juba

Art Unit

2872

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-7 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,5-7,9-16,19 and 20 is/are allowed.
- 6) ☒ Claim(s) 17 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Applicants' efforts to place this application in condition for allowance are noted with appreciation. In light of newly discovered prior art, the previous indication of claim 17 as containing allowable subject matter is withdrawn. The examiner regrets the delay in applying this art, and apologizes for any inconvenience.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Mizutani, et al (U.S. Patent number 5,898,511). Mizutani, et al disclose a method of forming hologram screens for diffracting an image from a projector (Col. 1, line 56 – Col. 2, line 8). Referring *for example* to Figure 12 and the associated text, Mizutani, et al disclose a hologram film (505) sandwiched between two transparent [film] members (504)(506) with a sealant (546)(547) interposed between the film and each of the two members. Quite apparently the sealant prevents sticking of the film (505) to the other two layers. In the alternative, the hologram "film" may be regarded as comprising all three photosensitive layers (504)(505)(506), the film being sandwiched between two transparent support members (671)(672) with a sealant (545)(548) intervening on both

sides. The examiner believes that, from among the photosensitive materials disclosed, at least the photopolymer (Col. 9, lines 40-45; Col. 17, line 60) will have the function of diffracting light after exposure, even prior to separation of the layers for further processing.

Allowable Subject Matter

Claims 1, 5 – 7, 9 – 16, 19, and 20 are allowable over the prior art. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art, taken alone or in combination, fails to teach or to fairly suggest, *in combination*,

the provision of holes through one transparent member and threaded holes or sprues in the other transparent member, as now recited in claim 1;

the particular arrangement of a PET layer, hard coat, and anti-sticking agent with respect to the first and second transparent members, recited in claim 9;

a sealant interposed to prevent partial sticking between the hologram film and the first transparent member and between the hologram film and the second transparent member, the sealant having the particular formulation recited in claim 18;

the first and second transparent members peripherally adhered to each other by an adhesive provided by via a release agent uniformly coated on the front and back surfaces of the hologram film, as recited in claim 19; or

the provision of through holes in both transparent members, as recited in claim 20.

Response to Amendment

Applicants' amendment is sufficient in overcoming the previous rejection of claims 12 and 18 under 35 U.S.C. § 112, second paragraph.

Applicants' amendment of claim 1 to include the limitations of claims 2 and 3 is sufficient in overcoming the previous rejection of claims 1, 5, and 7 under 35 U.S.C. § 102(b) as being anticipated by Hattori, et al, the previous rejection of claims 1 and 7 under § 102(b) as being anticipated by Nakashima, et al, and the previous rejection of claims 1 and 5 under § 102(b) as being anticipated by Kato, et al (U.S. Patent number 5,497,170).

The previous rejection of claims 11 and 13 – 16 under § 102(b) as being anticipated by Nakashima, et al has been overcome by amendment of these claims to depend from claim 9, previously indicated as containing allowable subject matter, and now presented in independent form.

Applicants' cancellation of claims 2 and 8 obviates their rejection over the prior art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kato, et al (U.S. Patent number 5,654,116) discloses a hologram screen between one or more cover plates with a sealant interposed therebetween, and disclose a peripheral region of the substrates suitable as a sealing region.

Tarumi, et al (U.S. Patent number 5,631,107) disclose a hologram for head-up displays, the hologram layer sealed having replaceable transparent covers which may be larger than the hologram. Tarumi, et al disclose a sealant interposed between the hologram film and the transparent members, and teach that an adhesion promoter may be used, but do not teach that the sealant *prevents* sticking. In one embodiment, a hydrophilic layer serves as a release agent at the interface of the hologram and one transparent member only.

Freeman, et al disclose a hologram for head up displays, the hologram between two removable transparent covers, there being a release agent on each of the covers in an area *peripheral to* the hologram film. In another embodiment, there is adhesive between a transparent carrier and the hologram layer, and the carrier and hologram layer are interposed between two polyethylene sheets by way of a slip agent.


HUGHES AIRCRAFT (EP 0 353 603 A2) disclose a hologram for head-up displays, the hologram arranged between two transparent members, there being a release agent between the hologram layer and one transparent member only.

Art Unit: 2872

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Juba whose telephone number is (703) 308-4812. The examiner can normally be reached on Mon.-Fri. 9 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Drew Dunn can be reached on Mon.- Thu., 9 - 5. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


JOHN JUBA
PRIMARY EXAMINER
Art Unit 2872

July 29, 2003